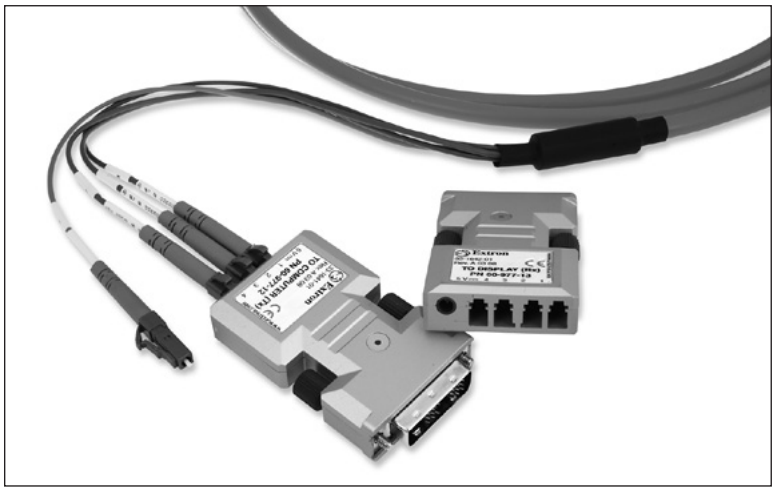
DVI 104

DVI FIBER OPTIC EXTENDER

- Transmits single link DVI-D signals over four multimode fiber optic cables
- Sends 1920x1200 and HDTV 1080p/60 signals up to 500 meters (1,640 feet)
- All digital technology for high performance signal transmission
- Pixel-for-pixel image quality
- EDID Minder
- Pre-terminated multimode fiber optic cables available from Extron



The Extron DVI 104 is a transmitter and receiver set that sends single link DVI signals over long distances up to 500 meters (1,640 feet) over four multimode fiber optic cables. It uses all digital technology to deliver perfect pixel-for-pixel transmission of computer-video images up to 1920x1200 resolution, including HDTV 1080p/60.

DESCRIPTION

The Extron **DVI 104** Fiber Optic Extender is a transmitter and receiver set that provides an effective, economical solution for extending single link DVI-D signals significantly beyond the specified 5 meter (15 foot) limitation for standard DVI cables. Engineered for reliability and exceptional high resolution image performance, it uses all digital technology to deliver perfect pixel-for-pixel transmission of computer-video images up to 1920x1200 resolution, including HDTV 1080p/60. The DVI 104 extends DVI-D signals over four multimode fiber optic cables at lengths up to 500 meters (1,640 feet).

The transmitter and receiver are housed in extremely compact DVI cable-type clamshell enclosures and connect to the fiber optic cables via industry standard LC-type connectors. The cables can be run through conduits and other tight spaces without the DVI 104 transmitter and receiver attached, simplifying installation.

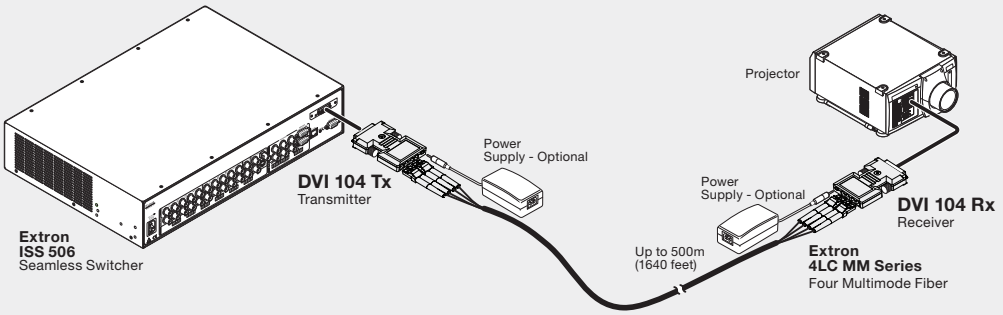
Furthermore, the DVI 104 transmitter and receiver units connect directly to DVI sources and displays, so that no special mounting is necessary.

To ensure a reliable DVI connection, the DVI 104 features EDID Minder, which automatically manages EDID communication with the input source, so that the source powers up properly and reliably delivers content to the display.

The DVI 104 is ideal for a wide range of applications requiring long distance transmission of high resolution content with the highest quality. Because transmission of content is inherently secure and immune to outside interference, applications utilizing fiber optics are favored in many commercial, rental and staging, and medical environments.

FEATURES

- **Transmits single link DVI-D signals over four multimode fiber optic cables**
- **Sends 1920x1200 and HDTV 1080p/60 signals up to 500 meters (1,640 feet)**
- **All digital technology provides pixel-for-pixel performance with signals up to 1920x1200, including HDTV 1080p/60**
- **EDID Minder** – A feature that enables automatic and continuous EDID management with the input source. EDID Minder ensures that the source powers up properly and reliably outputs content to the display.
- **Industry standard LC connectors provide reliable physical connectivity and precise fiber core alignment**
- **Self-powered by source signal** – The DVI 104 can be powered by the DVI port on the attached source device, eliminating the need for power supply installation.
- **Transmitter and receiver detachable from cables** – With the DVI 104 transmitter and receiver detached, fiber optic cables can easily be run through conduit and other tight-spaced environments.
- **Direct device connection** – The DVI 104 transmitter and receiver are housed in adapter-sized enclosures that attach directly to the source device and the display without the need for extra cables or mounting accessories.
- **Pre-terminated multimode fiber optic cables available from Extron in various lengths from 10 meters (33 feet) to 300 meters (984 feet)**
- **External universal power supply included** – Provides worldwide power compatibility.



Long Distance, Fully Digital Pathway Between Source Device and Display

The DVI 104 provides a high quality, long distance, fully digital pathway for high resolution DVI signals from the source device to the display. The use of fiber optic cables provides for long distance transmission up to 500 meters (1,640 feet) while fully maintaining pristine image quality for DVI signals up to 1920x1200 and HDTV 1080p/60. The DVI 104 is especially ideal for many applications in large-venue environments where high resolution digital video must be displayed and distances between the source and the projector are substantial.

OPTICAL FIBER INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

NOTE: These transceivers are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21, CFR 1040.10, and FDA 21 CFR 1040.11.

Optical fiber interconnection between transmitter and receiver

Number/type	4 fiber optic, multimode
Connectors	4 female LC connectors
Operating distance	Up to 1,640′ (500 m)
Nominal peak wavelength	850 nm

NOTE: Operating distance is approximate. This is a typical distance. The maximum distance may be greater than these typical numbers depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.

VIDEO

Gain	Unity
Maximum data rate	4.95 Gbps (1.65 Gbps per color)
Maximum pixel clock	165 MHz
Resolution range	Up to 1920x1200 or 1080p @ 60 Hz
Formats	RGB and YCbCr digital video
Standards	DVI 1.0

VIDEO INPUT — TRANSMITTER

Number/signal type	1 single link DVI
Connectors	1 male DVI-D

VIDEO OUTPUT — RECEIVER

Number/signal type	1 single link DVI
Connectors	1 male DVI-D

GENERAL

Power	Supplied by an external power supply or by the source device's 5 VDC output on pin 14 of a DVI connector
External power supply	100 VAC to 240 VAC, 50/60 Hz, external; to 5 VDC, 1 A, regulated
Power input requirements	5 VDC, 0.1 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Mounting	
Rack mount	No
Furniture mount	No
Enclosure type	Plastic
Enclosure dimensions	0.6" H x 1.5" W x 2.3" D (1.5 cm H x 3.9 cm W x 5.9 cm D) (Depth excludes DVI connector.)
Product weight	0.7 lbs (0.3 kg) per Tx/Rx pair
Shipping weight	1 lb (<1 kg) per Tx/Rx pair
Vibration	ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance	
Safety	CE, C-tick, CUL, UL
EMI/EMC	CE, C-tick, FCC Class A, FDA Class 1, ICES, VCCI
Environmental	Complies with the appropriate requirements of RoHS.
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

Model	Version Description	Part Number
DVI 104 Tx/Rx	Transmitter/Receiver Set	60-977-01

Optional Accessories

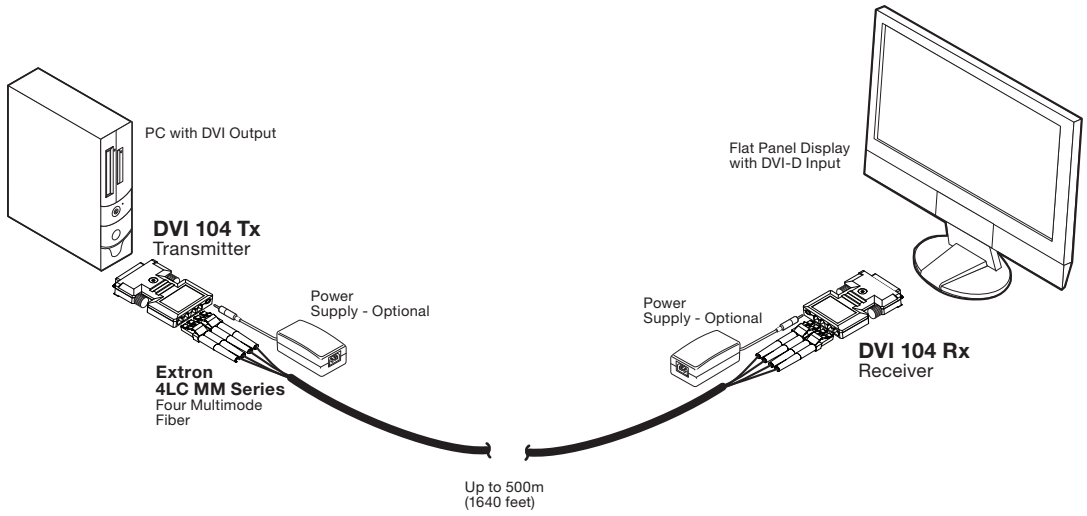
4LC MM Series

LC to LC Multimode Fiber Optic Cable Assemblies

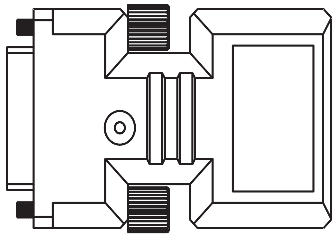
4LC MM/10m	10m (33')	26-652-01
4LC MM/20m	20m (66')	26-652-02
4LC MM/30m	30m (98')	26-652-03
4LC MM/40m	40m (131')	26-652-04
4LC MM/50m	50m (164')	26-652-05
4LC MM/60m	60m (197')	26-652-06
4LC MM/70m	70m (230')	26-652-07
4LC MM/80m	80m (263')	26-652-08
4LC MM/90m	90m (295')	26-652-09
4LC MM/100m	100m (328')	26-652-10
4LC MM/200m	200m (656')	26-652-11
4LC MM/300m	300m (984')	26-652-12

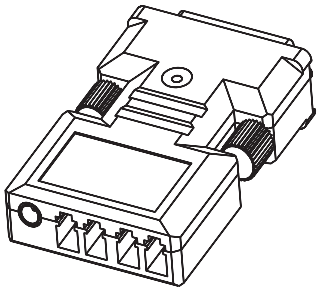
4LC MM/10m

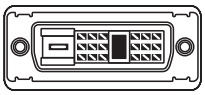
APPLICATION DIAGRAM

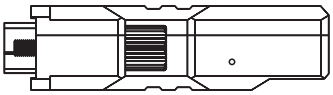


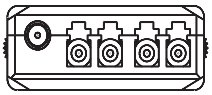
PANEL DRAWINGS











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